

WHAT IS CLAIMED IS:

- 1 1. A method for time-stamping a message to a mobile
2 recipient, the method comprising the steps of:
3 receiving a message at a message center, the
4 message intended for receipt by a given recipient;
5 detecting a location of the given recipient;
6 determining a time zone associated with a detected
7 location of the recipient; and
8 creating a time-stamp for said message using said
9 determined time zone.
- 1 2. The method of claim 1 comprising the further step
2 of transmitting said message with said time-stamp from
3 said message center to the recipient.
- 1 3. A method for time stamping a message to a mobile
2 station, the method comprising the steps of:
3 receiving a message for the mobile station at a
4 message center;
5 associating a first time with said message, said
6 first time related to the time of receipt of the message
7 by the message center;
8 determining if the mobile station is registered;
9 and
10 if the mobile station is registered,
11 detecting a location of the mobile station;
12 determining a time zone associated with a
13 detected location of the mobile station; and
14 creating a time-stamp that is associated with
15 said message using said first time and said determined
16 time zone.
- 1 4. The method of claim 3 wherein if it is determined
2 the mobile station is not registered, storing the
3 received message and the first time until such time as
4 the mobile station registers, and then

5 determining a location of the mobile station,
6 determining a time zone of the mobile station and;
7 creating a time-stamp that is associated with said
8 message using said first time and said determined time
9 zone.

1 5. In a wireless communication system, a method for
2 time stamping a message to a mobile station, the method
3 comprising the steps of:
4 receiving a message for a mobile station at a
5 message center at a first time;
6 interrogating a home location register (HLR) of
7 said mobile station to determine if the mobile station
8 is registered in the wireless communication system;
9 if said mobile station is registered, receiving
10 from the HLR information identifying a mobile switching
11 center through which the mobile station is registered;
12 determining a time off-set between the message
13 center and the identified mobile switching center; and
14 creating a time-stamp to be associated with said
15 message using said first time and said time off-set.

1 6. The method of claim 5 wherein if said mobile
2 station is determined to not be registered then, storing
3 the message and first time wherein the first time
4 constitutes an initial approximation of a time stamp,
5 said initial approximation subject to change upon
6 receipt of mobile station location information upon
7 subsequent registration by said mobile station.

1 7. A method for sending a time-stamped message to a
2 mobile recipient, the method comprising the steps of:
3 receiving a message at a message center in a first
4 time zone;
5 determining a second time zone in which the mobile
6 recipient is located;
7 creating a time-stamp based on said second time

8 zone; and
9 sending said time-stamp and said message to the
10 mobile recipient.

1 8. The method of claim 7 wherein said first and second
2 time zones are different.

1 9. The method of claim 7 wherein said step of
2 determining said second time zone comprises the step of:
3 determining a network node with which the mobile
4 recipient is registered.

1 10. The method of claim 9 wherein said network switch
2 comprises a switch providing wireless communication
3 capabilities.

1 11. A system for time stamping a message to a mobile
2 recipient comprising:
3 a home location register (HLR) that holds
4 information about where the mobile recipient is
5 registered;
6 a message center that receives a message for the
7 mobile recipient and queries the HLR for an indication
8 of a location of the mobile recipient; and
9 a time zone database identifying a time zone for
10 the indicated location of the mobile location;
11 wherein said message center time stamps said
12 received message using time zone information identified
13 by said time zone database.

1 12. The system of claim 11 wherein said indicator
2 identifies a mobile switching center with which the
3 mobile station is registered.